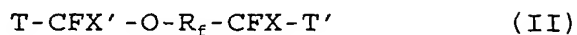


## CLAIMS

1. Hydrofluoroethers of formula:



wherein:

$T = CH_3$ ;

$X, X'$ , equal to or different from each other, are selected between  $F, CF_3$ ;

$T' = F, Cl, H, C_1-C_3$  perfluoroalkyl,  $CH_3, CH_2OH, COCl, CHO, CO_2H$ ;

$R_f$  is selected from:

- $C_2-C_{15}$  perfluoroalkylene;
- $-(C_2F_4O)_m(CF_2CF(CF_3)O)_n(CF_2O)_p(CF(CF_3)O)_q-$

wherein

the sum  $n+m+p+q$  ranges from 2 to 200,

the  $(p+q)/(m+n+p+q)$  ratio is lower than or equal to 10:100, preferably comprised between 0.5:100 and 4:100, the  $n/m$  ratio ranges from 0.2 to 6, preferably from 0.5 to 3;  $m, n, p, q$  are equal to or different from each other and when  $m, n$  range from 1 to 100, preferably from 1 to 80, then  $p, q$  range from 0 to 80, preferably from 0 to 50; the units with  $n, m, p, q$  indexes being statistically distributed along the chain;

- $-(CF_2CF_2CF_2O)_r-$  wherein  $r$  ranges from 2 to 200,

- $-(CF(CF_3)CF_2O)_s-$  wherein  $s$  ranges from 2 to 200,
2. A process according to claim 1, wherein  $R_f$  is selected from the following structures:
- $(CF_2CF_2O)_m-(CF_2O)_p-$ ,
- $(CF_2CF(CF_3)O)_n-(CF_2O)_p-(CF(CF_3)O)_q$
3. A process for the preparation of the formula (II) compounds of claim 1 comprising the reduction of the formula (III) corresponding precursors:
- $$T''-CFX'-O-R_f-CFX-T''' \quad (III)$$
- wherein:
- $T'' = COCl$ ,
- $T''' = F, C_1-C_3 \text{ perfluoroalkyl}, COCl, H, Cl$ ,
- $X, X', R_f$  are as defined in formula (II) of claim 1, carried out with gaseous hydrogen in the presence of a catalyst formed by supported platinum, preferably on metal fluorides, preferably in the presence of inert solvents, at a temperature in the range  $20^\circ C-150^\circ C$ , preferably  $80^\circ C-120^\circ C$ , at a pressure between 1 and 50 atm, preferably between 1 and 10 atm.
4. A process according to claim 3, wherein the metal fluorides are selected from the group formed by  $CaF_2$ ,  $BaF_2$ ,  $MgF_2$ ,  $AlF_3$ , more preferably  $CaF_2$ .
5. A process according to claims 3-4, wherein the Pt concentration on the support is comprised between 0.1%

and 10% with respect to the total weight of the catalyst, preferably between 1% and 2% by weight.

6. A process according to claims 3-5, wherein the catalyst is used in an amount in the range 1%-100%, preferably 10%-100% by weight with respect to the weight of the formula (III) compound.
7. A process according to claims 3-6, wherein the inert solvent is selected among perfluorotetrahydrofuran, perfluorotetrahydropyran, or their mixtures.